

CLOCK DATA RECOVERY CIRCUITRY AND
PHASE LOCKED LOOP CIRCUITRY WITH
DYNAMICALLY ADJUSTABLE BANDWIDTHS

[0064] Clock data recovery (CDR) circuitry or phase
5 locked loop (PLL) circuitry can be provided with a
dynamically adjustable bandwidth. One CDR circuit or
PLL circuit can be provided to support multiple systems
or protocols, multiple parameter requirements for a
given system or protocol, and changes in the input
10 frequency or data rate within a given system or
protocol. The parameters can include jitter (e.g.,
jitter tolerance, jitter transfer, jitter generation),
source of dominant noise, and lock time. Control
signals can be used to dynamically adjust the bandwidth
15 of the CDR circuitry or PLL circuitry while the
circuitry is processing data. The control signals can
be set by a PLD, by a processor, by circuitry external
to the PLD, or by user input.